

The contribution of digital technology in supporting older people manage their medicines

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Background: With an ageing population, the concurrent use of multiple medicines, or polypharmacy, is increasing. Multiple medicines and conditions can have a considerable impact on an individual, and between one-half and one half of all medication prescribed for long-term conditions is not taken as recommended.¹ Supporting community-dwelling older people to manage their multiple medicines is therefore imperative.

Aims: This review identifies and assesses which tools or resources are available for older people to manage multiple medicines or complex treatment regimens.

Methods: A scoping review² was conducted. Electronic databases (MEDLINE and CINAHL), grey literature, select paper citations, conference presentations, Cochrane Database of Systematic Reviews, and key author publications were iteratively searched. English-language studies that included medicines self-management tools were eligible. Data extracted from included articles were categorised on the basis of their utility, and the similarities and differences between tools were mapped.

Results: One hundred nineteen articles met our inclusion criteria and are included in the review. Findings suggest that, firstly, most tools are developed to ensure adherence—not medicine optimisation. Secondly, there has been a considerable growth in the development of digital technology for medicines management in the last decade. Lastly, it is unclear whether such tools are supporting medicines optimisation or mere adherence.

Conclusions: This review outlines the tools or resources, which may be useful for older people to self-manage multiple medicines, the evidence for the use of different tools, and gaps in knowledge for further research. It also questions the contribution of digital technology in supporting older people to manage their medicines. Evidence about such tools is warranted so that older people can maximise the use of their medicines, and consequently reduce the societal costs of the inappropriate use of medicines.

REFERENCES

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